

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

Complete if Known

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 4 of 4

Application Number	10/575,992
Filing Date	October 19, 2004
First Named Inventor	Robert E. Hefner Jr.
Art Unit	-Not Assigned-
Examiner Name	-Not Assigned-
Attorney/Agent Number	62027A

NON-PATENT LITERATURE DOCUMENTS

**Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.*

² Applicant's unique citation designation number or name. ³ Applicant is to place a check mark here in English language Translation is attached. This collection of information is required 37 CFR 1.38. The information is required to obtain or retain a benefit by the public which is to be (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing and submitting the completed application form to the USPTO. Any time vary depending upon the complexity of the application. If you have questions or require further information for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P. O. Box 1450, Alexandria, VA 22314-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. FEES ARE COLLECTED FOR PETITION, P. O. Box 1450, Alexandria, VA 22314-1450.

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
 (Use as many sheets as necessary)

Sheet 3 of 4

Application Number	10/575,992
Filing Date	October 19, 2004
First Named Inventor	Robert E. Hefner Jr.
Art Unit	Not Assigned
Examiner Name	Not Assigned
Attorney Docket Number	62927A

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
/MW/	BAKER, G. L. and J. K. Stille, "Hexaarylbenzene Units as Cross-Linking Sites for Polyquinolines", <i>Macromolecules</i> , 1979, pages 369-373, Volume 12, No. 3.		<input type="checkbox"/>
	BRAHAM, J. N., T. Hodgins, T. Katto, R. T. Kohl, and J. K. Stille, "Polyphenylenes via Bis(2-pyrones) and Diethynylbenzenes. The Effect of m- and p- Phenylene Unites in the Chain", <i>Macromolecules</i> , 1978, pages 343-346, Volume 11, No. 2.		<input type="checkbox"/>
	CAPEK, Ignac and Jakub Chudej, "On the fine emulsion polymerization of styrene with non-ionic emulsifier," <i>Polymer Bulletin</i> , Vol. 1999, 43, pp. 417-424		<input type="checkbox"/>
	DONESCU et al., "The Influence of Monomers upon Microemulsions with Short Chain Cosurfactant," <i>J. Dispersion Science and Technology</i> , Vol. 22, Nos. 2&3, pp. 231-244, 2001.		<input type="checkbox"/>
	FELDMAN, Ken S., Robert E. Ruckle, Jr., Susan M. Ensel and Paul H. Weinreb, "Synthesis of a Chiral Biphenyl disulfide: A Potentially Useful Reagent for Catalytic Asymmetric Synthesis", <i>Tetrahedron</i> , 1992, pages 7101-7102, Volume 33, No. 47.		<input type="checkbox"/>
	GUTSCHE et al., "Calixarenes. 6. Synthesis of a Functionalizable Calix[4]arene in a Conformationally Rigid Cone Conformation," <i>J. Am. Chem. Soc.</i> , Vol. 104, pp. 2652-2653 (1982)		
	KRAFT, Amo et al., "Supramolecular liquid crystals with columnar mesophases through self-assembly of carboxylic acids around a tribasic core" <i>Chem. Comm.</i> , pp. 1015-1016 (2000)		
	KUMAR, Uday and Thomas X. Neenan, "Diels-Alder Polymerization between Bis(cyclopentadienones) and Acetylenes. A Versatile Route to New Highly Aromatic Polymers", <i>Macromolecules</i> , 1995, pages 124-130, Volume 28, No. 1.		<input type="checkbox"/>
	LARPENT, C. and T. F. Tadros, "Preparation of microlatex dispersions using oil-in-water microemulsions", <i>Colloid Polmer Science</i> , 1991, pages 1171-1183, Volume 269, No. 11.		<input type="checkbox"/>
	LEE, Hyung-Kun et al., "Synthesis of a Nanoporous Polymer with Hexagonal Channels from Supramolecular Discotic Liquid Crystals," <i>Angew. Chem. Int. Ed.</i> , Vol. 40, No. 14, pp. 2669-2671 (2001)		
	LIU, Zhi, and Jarrold Meinwald, "5-(Trimethylstannylyl)-2H-pyran-2-one and 3-(Trimethylstannylyl)-2H-pyran-2-one: New 2H-Pyran-2-one Synthons", <i>J. Org. Chem.</i> , 1996, pages 6693-6699, Volume 61, No. 19.		<input type="checkbox"/>
	MCDONALD et al., "Diels-Alder Reactivity of Oxygenated Dienes and Furans. Synthesis of Oxygenated Biphenylyls," <i>J. Chem. Soc. Perk. Trans.</i> , Vol. 1, pp. 1893-1900, 1979.		<input type="checkbox"/>
	OGLIARUSO, Michael A. and Ernest I. Becker, "Bistetracyclones and Bishexaphenylbenzenes. II", <i>J. Org. Chem.</i> , 1965, pages 3354-3360, Volume 30.		<input type="checkbox"/>
	OGLIARUSO, Michael A., Lewis A. Shadoff and Ernest I. Becker, "Bistetracyclones and Bishexaphenylbenzenes", <i>J. Org. Chem.</i> , 1963, pages 2725-2728, Volume 28.		<input type="checkbox"/>
	PUTTERT et al., <i>J. Prakt. Chem.</i> , 1951, Vol. 149, pp. 183-216		<input type="checkbox"/>
	SCHILLING, Jr., Curtis L., Joe A. Reed, and J. K. Stille, "Diels-Alder Polymerizations. VI. Phenylated Polyphenylenes from Bis-2-pyrones and p-Diethynylbenzenes", <i>Macromolecules</i> , 1969, pages, 85-88, Volume 2, No. 1.		<input type="checkbox"/>
	TONG, Ling, Douglas M. Ho, Nancy J. Vogelaar, Clarence E. Schutt, and Robert A. Pascal, Jr., "The Albatrossenes: Large, Cleft-Containing, Polyphenyl Polycyclic Aromatic Hydrocarbons", <i>J. Am. Chem. Soc.</i> , 1997, pages 7291-7302, Volume 119, No. 31.		<input type="checkbox"/>
	TURCHI, Stefania, Fodoilo Nesli, and Donatella Giomi, "Reactions of 4,5-Dicyanopyridazine with Alkynes and Enamines: a New Straightforward Complementary Route to 4-Mono- and 4,5-Disubstituted Phthalonitriles", <i>Tetrahedron</i> , 1998, pages 1809-1816, Volume 54.		<input type="checkbox"/>
	VANKERCKHOVEN, Henk F., Yvan K. Gilliams, and J. K. Stille, "Poly(p-phenylene). The Reaction of 5,5'-p-Phenylenebis-2-pyrene with p-Diethynylbenzene", <i>Macromolecules</i> , pages 541-546, Volume 5, No. 5. 1972		<input type="checkbox"/>
	H. WARSON, <i>The Applications of Synthetic Resin Emulsions</i> , 1972, p. 88		<input type="checkbox"/>

Examiner: Indicate if reference considered, whether or not claimed in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.¹ Applicant's unique identification number (if any): ² Applicant is to provide check mark here in English and Translation attached. This collection of information is required by 37 CFR 1.36. The information is required to obtain or retain a benefit by the public which will result in the promotion of the public interest. The information is mandatory for processing the application to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P. O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-767-3969) and select option 2.

Examiner Signature /Melissa Winkler/ Date Considered 08/29/2008

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

Complete if Known

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 2 of 4

Application Number	10/575,992
Filing Date	October 19, 2004
First Names Inventor	Robert E. Hefner Jr.
Art Unit	<u>Not Assigned</u>
Examiner Name	<u>Not Assigned</u>
Attorney, Docket Number	62927A

FOREIGN PATENT DOCUMENTS

Examiner
Ch. /Melissa Winkler/ Date
08/29/2008

Signature _____ **Date** _____ **Considered** _____
Initial if reference is made to performance and not considered. Include copy of this form with next
communication to applicant, if applicable, unless citation designation number (optional). ² See Kind Codes of USPTO Patent Documents at www.uspto.gov or PMPR 90.14. Enter Office that issued the
document, by the two-letter code WIPO Standard ST.3. ⁴ Form Japanese patent documents. In the indication of the year of the
right, the year of the grant of the Emperor must precede the serial number of the patent document. ⁵ Kind
of document by the two-letter code WIPO Standard ST.18. ⁶ Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P. O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for

Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no person is required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

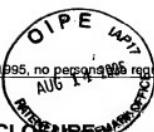
**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet

1

of 4

**Complete if Known**

Application Number	10/575,992
Filing Date	October 19, 2004
First Named Inventor	Robert E. Hefner Jr.
Art Unit	Not Assigned
Examiner Name	Not Assigned
Attorney Docket Number	62927A

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Publication Date (MM-DD-YYYY)	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
/MW/		US-4,400,540	08-23-1983	Bruce A. Reinhardt, et al.	
		US-5,189,117	02-23-1993	Robert E. Hefner Jr.	
		US-5,270,406	12-14-1993	Jimmy D. Earls et al.	
		US-5,637,669	06-10-1997	Robert E. Hefner Jr. et al.	
		US-5,965,679	10-12-1999	James P. Godschalk, et al.	
		US-6,156,812	12-05-2000	Kreisler Lau, et al.	
		US-6,172,128 B1	01-09-2001	Kreisler Lau, et al.	
		US-6,359,091 B1	03-19-2002	James P. Godschalk, et al.	
		US-6,653,358 B2	11-25-2003	Kenneth J. Bruza, et al.	
		US-6,887,910 B2	05-03-2005	Kenneth J. Bruza, et al.	
		US-2003/0027970 A1	02-06-2003	Roland Haasmann et al.	
		US-2003/0083392 A1	05-01-2003	Kenneth J. Bruza et al.	
		US-2003/0165625 A1	09-04-2003	Ying Hung So, et al.	
		US-2004/0053033 A1	03-18-2004	Q. Jason Niu, et al.	
		US-2004/0054111 A1	03-18-2004	Thomas H. Kalantar	
		US-2005/0014855 A1	01-20-2005	Kenneth J. Bruza	
		US-			

Examiner Signature /Melissa Winkler/

Date Considered

08/28/2008

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P. O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.